

## XFD700 Anti-human CD107 Antibody \*H4B4\*

Catalog Number: 11071190, 11071191

Unit Size: 100 tests, 500 tests

### Product Details

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|--------------------|---|
| Storage Conditions | 2-8°C with minimized light exposure. Do not freeze.                         |
| Expiration Date    | 12 months upon receiving  |
| Concentration      | Lot specific (please consult certificate of analysis for given lot)         |
| Formulation        | Phosphate-buffered saline (PBS, pH 7.2), 0.09% sodium azide, 0.2% (w/v) BSA |

### Antibody Properties

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|--------------------|-----------------------|
| Species Reactivity | Human                 |
| Class              | Primary               |
| Clonality          | Monoclonal            |
| Host               | Mouse                 |
| Isotype            | Mouse IgG1 kappa      |
| Immunogen          | CD107b (LAMP2, LAMPb) |
| Clone              | H4B4                  |
| Conjugate          | AF700                 |

### Biological Properties

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|                       |  |
|-----------------------|--|
| Appearance            | Dark blue liquid   |
| Preparation           | Antibody purified by affinity chromatography and then conjugated with AF700 under optimal conditions   |
| Application           | Flow Cytometry (FACS), Fluorescence Imaging  |
| Recommended Dilutions | For flow cytometry applications, the suggested concentration is at 5 uL/million cells in 100 uL staining buffer. For the best performance of each application, the optimal concentration of this reagent needs to be carefully determined. |
|                       | <i>*The suggested working dilution is provided as a guide only. It is recommended that the users titrates the product for use in their tests using proper positive and negative controls.</i>  |

### Spectral Properties

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Conjugate AF700

Excitation Wavelength 696 nm

Emission Wavelength 719 nm

## Applications

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H4B4 is an anti-human monoclonal antibody that targets the CD107b antigen. CD107b (sometimes called LAMP2 or LAMPb) is a 45 kD transmembrane protein that is found on the surface of cells like granulocytes and endothelial cells. In many organisms, CD107 is a suppressor of protein-containing complex assembly. Additionally, it has been associated with essential biological processes like chaperone-mediated autophagy, particularly protein targeting to lysosome involved in chaperone-mediated autophagy. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands. CD107 is a relatively rare antibody target, with fewer than 800 publications in the last decade. Even still, CD107b is typically used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of protein trafficking and clearance and neuroscience. This antibody was purified through affinity chromatography and conjugated to XFD700 (ex/em = 696/719 nm). XFD700 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 700 (Alexa Fluor® is the trademark of Thermo Fisher).